



Ø BEAT

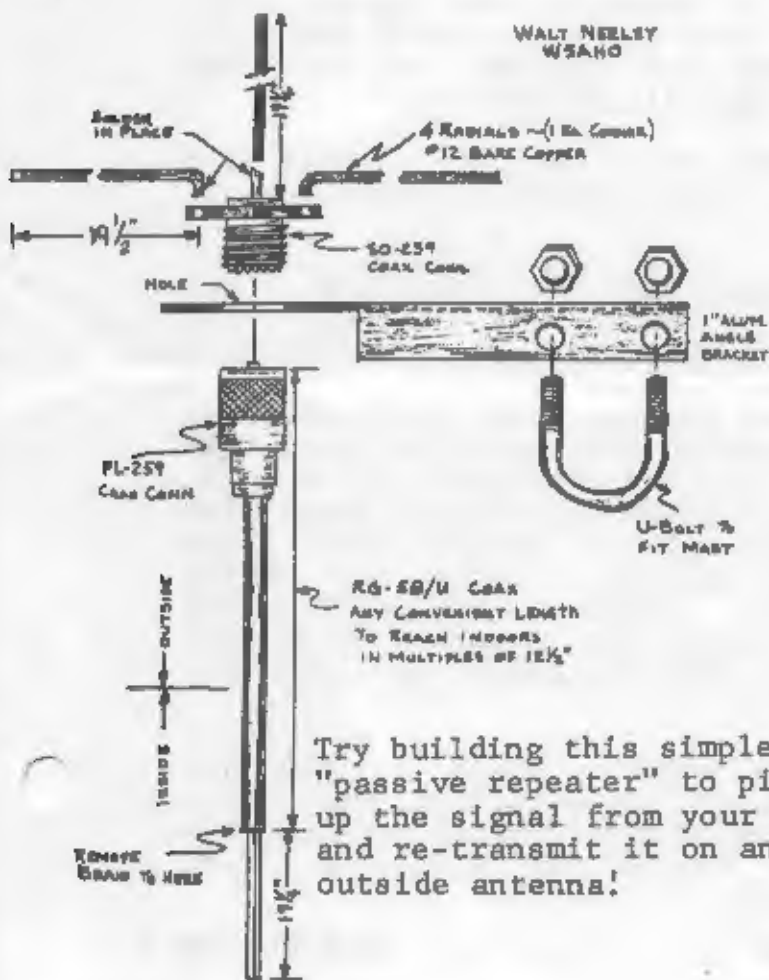
COLORADO SPRINGS,
COLORADO

MARCH 1984

MEETING MEETING MEETING MEETING MEETING MEETING

The next regular regular meeting of the Pikes Peak Radio Amateur Association will be at Guiseppe's Depot in the "Baggage Room" as was last months meet. Bring the wife and have dinner before the meet. (A sexist comment! Girls may bring their husbands, also. Sorry 'bout that.) See you all at the meeting.

MEETING MEETING



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March, 1984 Ø Best

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Board Member	Jake Jacobs NØCYR 104 Old Broadmoor Rd. 80906	634-2223
Board Member	Dave Vierling NØDV 2511 N. Tejon 80907	473-0293

ZERO BEAT is published monthly in the interest of the the members of the Pikes Peak Radio Amateur Association Inc., Colorado Springs, Colorado. Permission is given to reprint articles or excerpts provided credit is given. Deadline for submission of articles is the 21st of the month. Classifieds accepted anytime.

The Pikes Peak Radio Amateur Association meets on the second Wednesday of each month at Giuseppe's Depot Restaurant at 10 S. Sierra Madre at 7:30 p.m. All amateurs and interested parties are invited to attend.

Editor: Frank Drake KL7IPV, 4964 Harvest Rd. Colorado Springs, CO 80917 597-2406

FEBRUARY MEETING MINUTES FEBRUARY MEETING MINUTES

The regular meeting of the Pikes Peak Radio Amateur Association was called to order February 7, 1984, at 7:30 PM at Giuseppe's in the Depot. There were 55 members and guests present.

After introductions, and approval of previous minutes, Les reported the treasury balance of January 11th, to be \$2746.39. After income of \$338 and expenses of \$387.82, the balance for February 7th was \$2746.39.

Mark reported the Aurora hamfest is scheduled for March 18th. He also obtained several BC610 forms and has ordered 100 more. They have arrived from the FCC. Mark also reprinted that the CCARC and ARRL report forms are now due and will be sent in.

As it stands now, the Swapfest will be a one day affair and will be held at the International Polka Palace. Tickets are now being printed.

Doug reported for the RFI committee that the suspected radio interference from a certain model of radio was checked. the radio tested out to be within FCC specifications.

The educational committee reported the Ham tapes purchased last month appear to have a good presentation and should be usefull to the classes. Classes for novices will start at North Jr. High on April 10th. If anyone knows of a prospective hamand would like that person to receive information, please contact Mark. Frank reported that the Wednesday night upgrade classes are moving right along. Finally, anyone wishing to take the Novice/Tech/General/ect. test in Denver must submit a BC610 form to the Denver office prior to April 15th in order to take the test during the week of May 7th.

There be no old business, the meeting moved to the new business. The election for the new Vice-president was held. Nominees were, Oak KØROL, Mike KØTER, and Frank KL7IPV. After the voting was completed, Mike was elected as the new V.P. Congratulations Mike.

March, '84 4 Beat

BOARD MINUTES BOARD MINUTES BOARD MINUTES BOARD MINUTES

The monthly board meeting of the Pikes Peak Radio Amateur Association was called to order February, 13, 1984 at the home of Dave, N0DV. Present were Dave, Al N0CMW, Mike K0TER, Mark, N0EPF, Les KC0NC, Bill KQ0H, Jake N0CYR, and Frank KL7IPV.

Dave reminded Mark that the newspaper ad and library computer needs to be changed to a new phone number. Al volunteered the use of his number as he is usually home.

Unfortunately, because of job conflicts and an increase in working hours, Dave felt it necessary to resign his board position effective immediately. He will be missed and the board thanks him for his service. Thus, we need another board member. An election will take place at the March club meeting. The board, as nominating committee, is recommending Oak, K0ROL or Doc, W0MCT. Of course, nominations are always accepted from the floor.

Concern was expressed over improving some of the programs scheduled for the upcoming months. Mark will write to Bill Sheffield, KQ0J, to see about possible speakers, available through him, to speak about Field day at the April or May meeting. The club will try to get Herb Moore of the National Weather Service to return in March and speak about severe weather. Some members would also like to contact Ray AA0L, about possibly giving us some of his fine presentations from the Dayton Convention...or whatever else he wants to talk about.

The standing committees need volunteers to help chair them. Of particular need is the RFI committee chairperson. Committees will be listed in Zero Beat.

The board list on page two not only needs to be updated, but the asterisks beside some of the names needs explaining.. This was done in each Zero Beat in the past but was mistakenly dropped sometime previously and needs to be redone.

Moved & seconded---to have Les send \$.13 "penny postcards" to remind non-renewals that it is time to renew and invite them to rejoin the club. Motion passed unanimously.

Moved and seconded---to reimburse Oak for the expense of making back-up copies of the Ham Tapes. Passed unanimously.

There being no further business before the board, the meeting was adjourned at 9:45 PM. The next meeting will be on March 19th, 1984.

Respectfully submitted, Mark N0EPF

March, 1984 Ø Beat

It was moved and seconded to renew the club's membership in CCARC (we are charter members of the organization).t The motion passed unanimously.

The club extended a congratulations to Darla Richardson WBØDUV/DV for achieving her Advanced class license and also to Steve KAØROX for upgrading his license.

Members are again asked to submit any articles they feel appropriate for the Zero Beat to Frank. They may be from other newsletters as long as proper credit is given.

Mike announced the Walk for Mankind will be held on April 14th, the day before the Swapfest. Mike said that fifteen (15) or more people may be needed. He will ask for volunteers at the next meeting.

A number of members expressed thanks to Dave NØDV, for the the location of this evenings meeting place. Apparently the meals and service were satisfactory.

Persons interested in serving on the standing Swapfest committee can contact Frank. This committee will be looking at how to improve the Swapfest each year.

After the break, gerry Johnson NØCWZ, presented a slide program about the life and experiments of Marconi. The audience appeared to be quite impressed with pictures of the then modern equipment. It seems the " California Kilowatt " had it's origins in some place other than California. Thanks to Gerry for the quite interesting presentation.

The meeting then adjourned at 9:20 PM. The next meeting will be March 14th, at 7:30 PM., at Giuseppe's-the Depot.

Respectfully submitted,

Mard NØEPF

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MICROPHONES

March, '84 Ø Best
(possibly)

by Dave Olson, KL7K

This solution is not an original idea but it does work, and in my case quite well. It is easy to accomplish and you probably have the parts already in your junkbox.

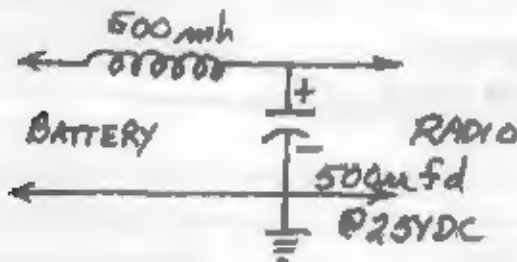
The alternator whine problem stems from the fact that an automobile alternator is in reality a 3 phase AC generator connected thru a full wave bridge rectifier. If you remember your theory you'll know that the output from such a device is pulsating DC. In this case the frequency will vary from 350Hz on up depending upon engine RPM. The only filtering that exists comes from the storage battery or your radio. Most 2 meter 10 watt wonders do not have adequate filtering to take care of this ripple and hence you hear the "whine" on your transmitted signal.

The simple solution to the problem is to add a choke input filter between the automobile electrical system and your radio to reduce the ripple to a level that no longer is audible. See the schematic below for L and C. A good filter should have lotsa L and C so that the series impedance is high and the shunt impedance is low. This sets up a voltage divider for the ripple and only a small portion of the ripple voltage appears across the radio power terminals. I have been successful using a home made choke and a 500 microfarad electrolytic capacitor rated at 25 VDC. The choke is made using a core from a filament transformer or an audio output transformer.

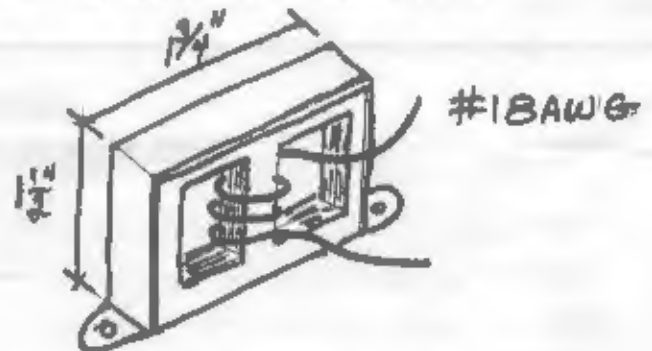
The old windings are removed by using a hacksaw blade parallel to the core and cutting thru the paper & conductors. You will need about 25 foot of #18 AWG insulated conductor. Wrap as much of the conductor around the center of the core as possible. Secure the ends of the conductor with electrical tape. Connect the capacitor observing polarity to one side of the choke.

Now install the unit close to the radio being careful to connect the radio to the capacitor side of the filter, and to get the negative side of the capacitor to a good ground connection on the vehicle chassis. The capacitor impedance is on the order of .9 an ohm so the ground needs to be good or the filter will be ineffective.

I did not measure my choke for inductance (do not have an L meter) but estimate it is on the order of 500 milli-henries. If I am correct, that is approximately 1000 ohms at 350 Hz. The filter will therefore attenuate the alternator whine by better than 60 dB.



SCHEMATIC DIAGRAM



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SWAPFEST SWAPFEST SWAPFEST SWAPFEST SWAPFEST SWAPFEST

The PPRAA swapfest will be held at the International Polka Palace on April 15th, 1984. The March meeting will be used to do some discussing on the help and "how-to's" of that function. Please plan to attend and offer your help in order that the swapfest will be a good one and enjoyable to all.

SWAPFEST SWAPFEST SWAPFEST SWAPFEST SWAPFEST SWAPFEST

ARES ARES ARES ARES ARES ARES ARES ARES ARES ARES ARES ARES ARES

As of 2-25-84 the ARES Net will meet on the 146.37/97 repeater. the net will meet as always on Wednsdays nights at 1900 hours, local time. This will be an ongoing use of the repeater until further notice.



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March 1984

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